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(54) Title: NOVEL APPLICATION OF BIOSENSORS FOR DIAGNOSIS AND TREATMENT OF DISEASE

(57) Abstract: A method for detecting compounds of interest in bodily fluids, including exhaled breath and blood. The present invention uses biosensors that mimic naturally occuring cellular mechanisms, including RNA oligonucleotide chains or «aptamers», in combination with molecular beacons or nanotechnology to provide an effective and efficient method for diagnosing a condition and/or disease with a patient. The subject invention also provides a method for screening those analytes/biomarkers likely to be present in exhaled breath.